

### Remarks

The Office Action dated November 12, 2010, notes that the drawings are objected to and the following rejections are presented: claims 1-6 and 9-11 stand rejected under 35 U.S.C. 102(b) over Hyman (U.S. Patent No. 6,504,118); and claims 7-8 stand rejected under 35 U.S.C. § 103(a) over the '118 reference. In the following discussion, Applicant does not acquiesce in any regard to averments in the Office Actions of record (unless Applicant expressly indicates otherwise).

Regarding the objection to Figures 3 and 7 for darkness, Applicant has submitted replacement drawings herewith, and believes that the objections are no longer applicable. With respect to the Office Action's assertion that the bending limitation of claim 3 is not shown in the drawings, Applicant submits that the Office Action has not provided any rationale under the M.P.E.P. (or otherwise) that would support the objection. Further, the Office Action has not established that the drawings do not meet the requirements of the M.P.E.P. with respect to these limitations. Referring to M.P.E.P. § 2153, "[p]ossession may be shown in many ways. For example, possession may be shown by describing an actual reduction to practice of the claimed invention. Possession may also be shown by a clear depiction of the invention in detailed drawings." As applicable here, the claim limitations are exemplified in various embodiments described in the specification, and also in connection with example embodiments shown in the figures. For instance, paragraph 0054 describes an example embodiment, and also references Figures 3 and 7. Accordingly, Applicant submits that the objections to the drawings are no longer applicable and/or improper in view of the above, and requests that they be removed.

Applicant respectfully traverses the § 102 and § 103 rejections over the sole '118 reference because the cited reference lacks correspondence. For example, the asserted reference does not teach the claimed invention "as a whole" (§ 103(a)) including aspects regarding, *e.g.*, an electrode layer that is structured into electrodes and defines a displacement area, and a MEMS electrode in the displacement area. Because the reference does not teach these aspects, no reasonable interpretation of the asserted prior art can provide correspondence. As such, the rejections fail.

More specifically, Applicant submits that the Office Action has not established that the sole '118 reference discloses electrode layers that define a displacement area, in which a MEMS electrode is located (as claimed). Referring to the rejection of claim 1 at page 3 of the Office

Action by way of example, a “second electrode layer” is asserted as corresponding to reference numerals 315, 320 and 365 in Figures 13A-13C of the ‘118 reference. The Office Action later asserts that reference numeral 320 is also a “first MEMS electrode” as claimed. Applicant fails to understand how the same component (320) can both define a displacement area in which another electrode is located, and also be this (another) electrode in the defined area. While it is unclear as to which claim limitations the Office Action is asserting the component 320 to be, the ‘118 reference refers to component 320 as an “actuator contact element.” The Office Action has provided no explanation as to how this “actuator contact” corresponds to either an “electrode layer” or a “MEMS electrode” as asserted.

To add confusion, the Office Action later asserts that a “top electrode is made of elements 327, 325 and 392” that defines the displacement area in which a first MEMS electrode is located. However, as discussed above, the Office Action has asserted that component 320 is a first MEMS electrode. This assertion is misplaced, as the asserted elements 327, 325 and 392 do not define a displacement area in which the component 320 is located (these elements are on an opposite side of 324, relative to component 320). Furthermore, the Office Action has not cited to any discussion in the ‘118 reference that would support its assertions as to what the cited reference numerals correspond to. Applicant therefore submits that the Office Action has not established correspondence to the claimed electrode layers and MEMS electrode.

In view of the above, the rejection of independent claim 1 is improper. The rejections of each of the dependent claims are also improper for the above reasons, in accordance with M.P.E.P. § 2143.03. Applicant submits that various rejections of the dependent claims are also improper for failing to establish correspondence to the claim limitations. For example, the rejections of claims 2, 5 and 6 rely upon the Examiner’s statements regarding what the ‘118 reference is asserted as doing or corresponding to, but lack citation to supporting structure with related description in the reference. Specifically regarding the rejection of claim 2, Applicant cannot ascertain any disclosure in the ‘118 reference that mentions a polarization of the asserted “piezoelectric” layer 324. The rejection of claim 3 is also improper for giving “little patentable weight” to limitations characterizing a configuration of the piezoelectric layer (Applicant believes no portion of the M.P.E.P. or relevant law would support the giving of “little patentable weight” or define any degree of what such “little” weight would be). With respect to the rejection of claim 4, Applicant cannot ascertain that the cited “base 301” clamps any portion of

the asserted piezoelectric component (it appears that there is no fixing or clamping in cited Figures 13A-13B). Accordingly, the rejections of the dependent claims are further improper for these reasons as well.

Applicant further traverses the § 103 rejection of claims 7-8 over the sole '118 reference because the Office Action has failed to cite any corresponding disclosure, and has improperly asserted that the limitations not cited in the prior art are simply a "design choice." Referring to page 5 of the Office Action, the rejection indicates that the '118 reference "fails to disclose the bottom electrode as a continuous electrode." The Office Action then goes on to assert that it "would have been obvious" to use a continuous electrode, based upon unrelated assertions regarding what Applicant has disclosed with regard to solving a problem, and to an alleged (and unexplained) performance of the claimed invention. Applicant submits that such assertions are improper for maintaining a rejection under § 103.

More specifically, the assertion that the missing limitations are a matter of "design choice" is contrary to M.P.E.P. § 2144.04, as particularly applicable here as the Office Action failed to provide a proper reason or motivation for modifying the '118 reference. According to the M.P.E.P. § 2144.04, in rare situations rejections based on limited design choice assertions can be supported but only when stringent requirements are met: "The mere fact that a worker in the art could rearrange the parts of the reference device to meet the terms of the claims on appeal is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device."<sup>1</sup> As applicable here, the Office Action has not directly asserted any motivation, and the comments made in connection with the rejection fail to establish that one of skill in the art would be motivated to make such "necessary changes" per the Office Action's assertions. Moreover, the Office Action has presented its "design choice" assertion relative to an improper arrangement of parts, rather than an arrangement of parts as taught by an embodiment found in an asserted reference. Thus, these "design choice" assertions violate M.P.E.P. § 2144.04 for multiple reasons.

Applicant further traverses the § 103 rejection of claims 7-8 because the '118 reference teaches away from the Office Action's proposed combinations, including the "design choice" assertions. Consistent with the recent Supreme Court decision, M.P.E.P. § 2143.01 explains the

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<sup>1</sup> Citing *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984)

long-standing principle that a § 103 rejection cannot be maintained when the asserted modification undermines either the operation or the purpose of the main reference - the rationale being that the prior art teaches away from such a modification. *See* KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 417 (U.S. 2007) (“[W]hen the prior art teaches away from combining certain known elements, discovery of a successful means of combining them is more likely to be non-obvious.”). The Office Action has not explained how the asserted combination, in which a continuous electrode would be formed (*e.g.*, under component 324), would or could operate in accordance with the ‘118 reference or otherwise. For instance, it appears that such an electrode would short/connect various circuits as shown in the cited Figures, which would appear to render the ‘118 reference inoperable. Under M.P.E.P. § 2143.01 and KSR, the rejections cannot be maintained.

Applicant has amended various claims to improve readability, such as by adding punctuation and transitions (“and”), for readability and for consistency with respect to antecedent terms and amendments thereto. With respect to claims 9-11, Applicant has amended these claims to remove the method-based limitations as well, and believes that the rejections based upon these limitations would no longer be applicable. Applicant has also amended claim 1 to include limitations relating to the application of different voltages for separately deflecting the displacement area. Applicant has also added new claims 12 and 13. Support for these claims may be found throughout the specification and figures, with exemplary embodiments shown in and described in connection with Figure 4, at page 6:28-7:22, and at page 3:1-7. Applicant believes these claims are allowable over the cited references as asserted in the Office Action for reasons including those discussed above. Applicant also believes that the claims are allowable over the cited portions of the ‘118 reference, which (as asserted in the Office Action) do not appear to disclose limitations directed to at least two electrodes in one of the electrode layers, driving electrodes under different voltages, or a driver that drives the electrodes in polarization and operation modes as claimed.



In view of the above, Applicant believes that each of the rejections is improper and should be withdrawn and that the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the attorney/agent overseeing the application file, David Schaeffer, of NXP Corporation at (212) 876-6170 (or the undersigned).

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Attachment: Replacement Drawing Sheets

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